

Mechanical Trencher





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AssoTrencher IV' sits at the top of trenchers range and is currently undergoing its thirteenth upgrade. Its long track record has proven its worth as durable, efficient and long-lasting hard soil and rock trenching machine.

The AssoTrencher IV 13th upgrade is designed to cover the need for Post Lay Burial of products in hard seabed with increased production rates and assurance on the burial depth of the cable with the use of a powerful eductor suction system.

The design of the vehicle has incorporated all the advantages found in the previous arrangements of the Assotrencher family and in practice combines the ability to load heavy products (incl. bundled) with small to no slack in bottom-loading configuration, ensures trench cleaning with the use of its two eductor suction systems keeping this way the effectiveness of achieving the burial depth in hard/mixed soil conditions.





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Specifications

	Trenching Configuration	Backfilling Configuration
Max. Length	12.6 m	14.6 m
Max. Breadth	6.0 m	7.4 m
Max. Weight	60 Te	75 Te
Max. Height		7.5 m
Depth rating		800 m
Cutting Chain Max. Soil Shear Strength		3 Мра
Cutting Wheel Max. Soil Shear Strength		50+MPa
Cutting Chain Max. Trench Depth		2.30 m
Cutting Wheel Max. Trench Depth		1.25 m
Max. Seafloor Gradient		±15 deg (pitch & roll)
Max. Product Diameter		300 mm
Total Power		1.560 kW

Key Features

- 1.56 MW of installed power
- 2.30 m cutting chain trench depth capability
- 1.25 m cutting wheel trench depth capability
- Wide variety of accessories including:
 - Rear eductor system
 - Mid-eductor system
 - Mouldboards & backfilling eductor
- In-house design
- Fast trenching rates
- Dead-sub automatic release of product
- Power Management System for optimal performance
- Intelligent VFD controls through in house PDU
- Post Lay Burial with minimal slack requirement of laid product
- AHC launching capability
- Assured cable depth in various soil conditions
 with the use of eductor system
- Combination of jetting/trenching techniques
- Wide soil range capability

Performance

The vehicle has, in total, $6 \ge 260 \text{ kW} = 1560 \text{ kW}$ output, out of which multiple configurations can be selected depending upon project requirements. A typical configuration can be seen below:

- 2x260 kW / 3.3 kV electric motors driving the trenching tool
- 3x260 kW / 3.3 kV electric motors driving the three HP water pumps
- 1x260 kW / 3.3 kV motor driving the hydraulic pumps for the thrusters, the vehicle tracks and the auxiliary hydraulic circuits





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Trenching System

- 600 mm-wide cutting chain (project configurable) fitted in the middle of the vehicle
- 450 mm-wide cutting wheel (project configurable) fitted in the middle of the vehicle
- Bottom loading system with monitoring to allow for safe handling of product
- Eductor suction system fitted on the back of the vehicle to remove backfill material
- Eductor suction system fitted on the trenching tool to remove backfill material
- Mouldboards fitted on the back of the vehicle to achieve designated cable cover
- Backfilling eductor for assisting purposes in mouldboards operation

Sensor Equipment

Up to 16 x low light cameras

Up to 16 x LED high intensity fully dimmable lights

Up to 7 x electric pan/tilt units

Up to 3 x imaging or profiling sonar

Up to 3 x Blueview 2D Multi-beam sonar

1 x Valeport minilPS sensor

1 x CSL TOGS/NAV FOG, Octans or Lodestar

Cable Tracker TSS 350/440 available

Various cable cutters available

Vehicle Features

In house design trenching tool for max efficiency

In house design hydraulic system

In house design of water pumps & distribution system

In house design of electrical power-distribution

In house design of cameras, lights & telemetry architecture

In house design of control system

Deep burial at hard/mixed soil conditions and bedrock

Wide variety of tracks to ensure best traction/ground pressure ratio

Supported by the new ASSO design PDUs to allow frequency control on all subsea motors and power management

Dead-sub auto release system





Membership -Accreditations



Disclaimer

The specification details are illustrative for marketing purposes only. Actual equipment may be different as a result of product improvement or other reasons. Specific interface and performance information should be reconfirmed at time of order placement. Specifications are subject to change without any prior notification.

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